Utah Crisis Standards of Care Guidelines

August 13, 2020



Produced in cooperation with







Table of Contents

About the Guidelines/Scope of Document	2
Acknowledgments/Contributors	3
Statement on Application of Civil Rights Laws during an Emergency	4
Utah Crisis Standards of Care Protocol	5
Utah Crisis Standards of Care Algorithm	8
MSOFA Table	9

About the Guidelines

This is an update to and a replacement of the 2010 Utah Pandemic Influenza Hospital Triage Guidelines, the 2018 Utah Crisis Standards of Care Guidelines and the prior version of the 2020 COVID-19 Annex. Prior categorical exclusion criteria and allocation of resources based on individual patients' long-term survival probability and resource-intensity/duration of need in these previous plans no longer apply and should be removed from existing provider CSC plans.

The purpose of this document is to guide the allocation of scarce patient care resources during an overwhelming public health emergency when the demand for services dramatically exceeds the supply of the resources needed. The foundation of our approach to crisis standards of care is that such tragically difficult decisions must be based on criteria that ensure that every patient has equitable access to any care from which they might benefit. This protocol does not discriminate based on race, disability, gender, sexual orientation, gender identity, ethnicity, ability to pay, socioeconomic status, perceived social worth, perceived quality of life, immigration status, incarceration status, homelessness, or exercise of conscience and religion. It meets the CSC ethical goals of fairness, duty to care, transparency, consistency, proportionality, and accountability.

Application of these guidelines will require and depend on physician judgment at the point of patient care. We recommend the use of Crisis Triage Officers (CTOs) or CTO Teams be used during contingency and crisis care. This document will be updated as needed.

Scope of this Document

When a situation is statewide: These triage guidelines apply to all healthcare professionals, clinics, and facilities in the state of Utah. The guidelines apply to all patients.

When the situation is limited to a specific area of the state: These guidelines will only apply to the medical community affected and the immediate surrounding communities. However, if non-impacted community medical facilities are overwhelmed as a direct result of the event (population displacement, resource shortages, staffing shortages) consideration will be provided to extend the protections on a case-by-case basis.

When activated: Guidelines should be activated in the event of a public health emergency declared by the governor of the State of Utah. Individual healthcare facilities and organizations will manage their responses through their designated emergency operations plans and incident command structures. In turn, local hospitals will communicate with both local and state health department emergency operations centers as well as their regional healthcare coalitions to provide situational awareness and coordination regarding local response efforts and requests.

Acknowledgments/Contributors

These guidelines were developed by the Utah Hospital Association Crisis Standards of Care Workgroup (members listed below), as a result of a contract with the Utah Department of Health and the Hospital Preparedness Program Grant CFDA #93.889 U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. This August 2020 version has been modified by the Utah Department of Health, in consultation with the Office for Civil Rights at the U.S Department of Health and Human Services, and with additional input from the Utah Crisis Standards of Care Workgroup. The views expressed in the publication do not necessarily reflect the official policies of the U.S. Department of Health and Human Services or the Utah Department of Health.

Utah Hospital Association Crisis Standards of Care Workgroup

- CHAIR Mark Shah, MD, Intermountain Healthcare and Utah Emergency Physicians
- STAFF Jan Buttrey, Emergency Preparedness, Utah Hospital Association
- STAFF Kevin McCulley, Preparedness and Response Director, Utah Department of Health
- Gordon Larsen, Policy Director, Office of the Governor, State of Utah
- **Dirk Anjewierden**, Executive Director, Utah Health Care Association
- Kevin Arthur, Emergency Management Program Manager, Primary Children's Hospital (2018)
- Mark Bair, MD, RPh, FACEP, Emergency Medicine, Mountain View Hospital (2018)
- Brenda Bartholomew, RN, Chief Nursing Officer, Gunnison Valley Hospital
- **Philip Chaffee,** Emergency Manager, University of Utah Health
- Ralph Costanzo, MD, Chief Medical Officer, St. Mark's Hospital, MountainStar Healthcare
- Jordy Cox, MD, Critical Care, Salt Lake Regional Medical Center, Steward Health Care
- Colin Grissom, MD, Senior Medical Director of Critical Care Services, Intermountain Healthcare
- Hilary Hewes, MD, Pediatric Emergency Medicine, University of Utah
- **Steve Ikuta**, Emergency Management Program Manager, Intermountain Healthcare Southwest Region (2018)
- **Jay Jacobsen, MD,** Medical Ethicist
- Arlen Jarrett, MD. Chief Medical Officer, Utah Region, Steward Health Care
- **Robert Jex, RN, MHA, FACHE,** Specialty Care Program Manager, Bureau of Emergency Medical Services and Preparedness, Utah Department of Health (2018)
- Bart Johansen, MD, Jordan Valley Medical Center, Steward Health Care
- Jared Johnstun, MD, Critical Care Medicine, St. Mark's Hospital, MountainStar Healthcare
- **John Jones,** Emergency Manager, MountainStar Healthcare
- Paul Krakovitz, MD, Chief Medical Officer Specialty Based Care, Intermountain Healthcare
- Bryan Larsen, Emergency Management Program, IASIS Healthcare (2018)
- Annette Newman, MS, RN, CCRN, Burn Disaster Coordinator, University Burn Center
- Mark Oliver, MD, Internist and Infectious Diseases, St. Mark's Hospital, MountainStar Healthcare
- Brad Poss, MD, Pediatric Critical Care, University of Utah
- Susan Puls, MD, FAAOS, Medical Consultant, Emergency Response, Missionary Health Services, The Church of Jesus Christ of Latter Day Saints (2018)
- Sue Robel, RN, Senior Vice President, Chief Nursing Executive, Intermountain Healthcare
- Stephanie Saperstein, Assistant Attorney General, Environment and Health Division
- **Joan Sheets, MD**, Medical Director, Rainbow Kids Palliative Care Program, Primary Children's Hospital, University of Utah Department of Pediatrics (2018)
- Micah Smith, DO, Emergency Department, Timpanogos Regional Hospital (2018)
- Peter Taillac, MD, University of Utah Health/Utah Department of Health EMS Medical Director
- Don Van Boerum, MD, Shock Trauma ICU, Intermountain Medical Center (2018)
- Russell Vinik, MD, Chief Medical Officer, University of Utah Health Plans
- Brent Wallace, MD, Chief Medical Officer, Intermountain Healthcare, Committee Chair (2018)
- G.J. Willden, MD, Gunnison Valley Hospital, rural physician representative

Statement on Application of Civil Rights Laws during an Emergency

The Americans with Disabilities Act, Section 504 of the Rehabilitation Act, the Age Discrimination Act, and Section 1557 of the Affordable Care Act prohibit discrimination in HHS funded health programs or activities. These laws, like other civil rights statutes, remain in effect during an emergency. As such, persons with disabilities should not be denied medical care based on stereotypes, assessments of quality of life, or judgments about a person's relative "worth" based on the presence or absence of disabilities or age. Decisions by covered entities concerning whether an individual is a candidate for treatment should be based on an individualized assessment of the patient based on the best available objective medical evidence. In addition, the prohibition on the use of quality of life judgments in the allocation of treatment resources applies both to assessments of pre- and post-treatment quality of life.

As resources allow, government officials, health care providers, and covered entities should not overlook their obligations under federal civil rights laws to help ensure all segments of the community are served by:

- Providing effective communication with individuals who are deaf, hard of hearing, blind, have low vision, or have speech disabilities using qualified interpreters, picture boards, and other means;
- Providing meaningful access to programs and information to individuals with limited English proficiency using qualified interpreters and through other means;
- Making emergency messaging available in plain language and in languages prevalent in the affected area(s) and in multiple formats, such as audio, large print, and captioning, and ensuring that websites providing emergency-related information are accessible;
- Addressing the needs of individuals with disabilities, including individuals with mobility impairments, individuals who use assistive devices, auxiliary aids, or durable medical equipment, individuals with impaired sensory, manual, and speaking skills, and individuals with immunosuppressed conditions including HIV/AIDS in emergency planning;
- Respecting requests for religious accommodations in treatment and access to clergy or faith practices as practicable.

BULLETIN: Civil Rights, HIPAA, and the Coronavirus Disease 2019 - https://www.hhs.gov/sites/default/files/ocr-bulletin-3-28-20.pdf

Utah Crisis Standards of Care Protocol

Contingency Care: Every effort should be made to avoid Crisis Standards. CTOs should make frequent assessments of ICU beds, provider staffing, non-invasive ventilators, high-flow nasal cannula devices, and invasive ventilators relative to anticipated patient demand (hereafter ICU capacity, staffing, and equipment is referred to as ICU/ventilator supply or capacity). Contingency strategies should be maximized based on evidence-based best practices as they emerge, including load leveling within and between hospitals and healthcare systems through coordinated patient and resource allocation.

Crisis Care: If ICU/ventilator capacity becomes insufficient, the CTO or other hospital representative should communicate the situation with Incident Command at the facility, system, health district, and state level. The Governor would then authorize Crisis Standards statewide, and additional load leveling should be attempted. ICU/ventilator care needs to be increasingly focused on those that are more likely to benefit from it, to meet the goal of "the greatest good for the greatest number." Additionally, non-ICU care, including comfort care, needs to be made available to those that are critically ill but unlikely to benefit from ICU care. This pivot will be facilitated by end of life discussions with family, and Modified Sequential Organ Failure Assessment (MSOFA) scorebased prioritization (table 1); all assisted by the CTO, and described in the protocol below. All these goals must be accomplished and implemented in compliance with applicable civil rights laws.

Assessment tools, such as the MSOFA or Revised Trauma Score, may need reasonable modifications to ensure that disability-related characteristics unrelated to short-term mortality risk do not worsen the patient's score. For example, the Glasgow Coma Scale, a tool for measuring acute brain injury severity in the MSOFA, adds points to the MSOFA score when a patient cannot articulate intelligible words or has difficulty with purposeful movement. For patients with pre-existing speech disabilities or disabilities that effect motor movement, this may result in a higher MSOFA score even in instances where the patient's disability is not relevant to short-term mortality risk.

For patients considered for ICU/ventilator care when Crisis Standards of Care are enacted:

Step 1)

Engage in a shared decision-making discussion with the patient/surrogate, early on and throughout the patient's care that focuses on obtaining either informed consent or informed assent (in which the family is explicitly offered the choice to defer to clinicians' judgment) regarding life-sustaining therapy. Provide information on the full scope of available alternatives, including the risks and benefits of potentially prolonged ICU/ventilator care with its attendant risks of discomfort and uncertain prospects for recovery, and convey specific recommendations about the medically proposed course. Attempt to obtain any POLST or other advance directive documentation, through the EMR or by contacting the sending care center, if guidance from the patient/surrogate is not available. If indicated by documentation or if the patient/surrogate declines ICU care, arrange for non-ICU care.

Hospitals may not re-allocate a personal ventilator (defined as a ventilator brought by the patient to the acute care facility at admission to continue the patient's pre-existing personal use with respect to a disability). This prohibition also applies to re-allocation decisions under other parts of the CSC.

These discussions on goals of care need to occur independently from triage decisions, and should be led by the treating provider, and not by the CTO. Providers must be careful not to coerce patients or their families to make particular advanced care planning decisions for the good of the facility or due to perceptions of quality of life or relative worth. Providers may not impose blanket Do Not Resuscitate policies for reasons of resource constraint. Providers may not require patients to consent to a particular advanced care planning decision in order to continue to receive services from a facility.

Non-ICU Care Criteria: Patients with the following conditions should be offered non-ICU care:

- a) DNR or similar POLST or advance directive.
- b) Cardiac arrest without easily identifiable AND reversible cause.

The following must be evaluated using reasonable modifications for individuals with underlying disabilities, where appropriate:

- (c) Severe acute trauma with a REVISED TRAUMA SCORE < 2.
- (d) Acute MSOFA greater than 11, as initial cutoff.
- (e) Acute MSOFA greater than the Crisis MSOFA Cutoff determined in Step 3.

All conditions in the non-ICU care criteria should be evaluated based on an individualized assessment of the patient based on the best available objective medical evidence.

MSOFA does not apply to patients less than age 14. For pediatrics, clinicians should use the other non-ICU care criteria, and best clinical judgment. In addition, conditions may be added, removed, or adjusted based on new evidence or evolution of the crisis.

Provide critical care stabilization IF ICU/ventilator care is not declined by the patient or the patient's authorized representative, non-ICU criteria are not present, and resources are available. Inform the patient/surrogate of the potential need to evaluate the appropriateness of ICU/ventilator care support going forward, including the need for surrogates to be readily available for discussion and decision making.

Step 2)

Patients in whom ICU/ventilator care is not proving beneficial based on MSOFA (Acute and Persistent MSOFA > 11, or MSOFA 8 to 11 AND increasing trend) and individualized assessment based on the best available objective medical evidence should be considered for transition to non-ICU care. This will require discussions with patients and/or their legal authorized representative. The goal is to maintain available ICU/ventilator capacity whenever possible using a "stay ahead by at least one ventilator" paradigm for ICU bed, staffing, and equipment.

Step 3)

If additional ICU/ventilator needs increase and exceed capacity, additional ICU/ventilator withdrawal will be needed to achieve the goal of having some ICU/ventilators available. This should be made based on MSOFA score calculations in combination with individual assessments based on the best available objective medical evidence for all patients on ICU/ventilator care for at least 48 hours and then at least every 24 hours. First, patients with MSOFA > 11, or MSOFA 8 to 11 AND increasing trend need to be considered for transition to non-ICU care. If additional ICU/ventilator care is needed, the patients with the highest MSOFA or those with worsening MSOFA score trends should be considered for transition to non-ICU care to meet the ongoing ICU/ventilator demand. This Crisis MSOFA Cutoff for ongoing ICU/ventilator care needed to create enough capacity for new ICU/ventilator demand should be communicated to Incident Command at the facility, system, and state level, to allow for ongoing resource sharing and load leveling

primarily via patient admission adjustments as a means to make this Crisis MSOFA Cutoff as even as possible across the state.

The MSOFA allows for grouping of patients with broadly similar severity of acute illness. Providers/CTOs will need to conduct additional individual assessment to determine predicted short-term outcomes, using the best and most appropriate information or tools available, such as the Baux score for burn patients. Short-term outcome estimates may need to be sought from other specialty providers depending on the patient's illness(es).

Additional protections may be called for in the Step 3 re-allocation process to ensure that people with pre-existing disabilities have an opportunity for equitable treatment. These may include reasonable modifications to the assessment process for re-allocation and additional protections for chronic ventilator users.

As currently written, this protocol tries to keep ICU/ventilator care available for new patients that may benefit from it, by withdrawing ICU/ventilator care from those not benefiting from it. If the crisis deepens and we learn that patients need more time on ICU/ventilator care to survive, this "stay ahead by at least one vent" strategy may need to be abandoned in order to achieve the primary goal of "do the greatest good for the greatest number."

Special Considerations:

Pregnancy: Patients with pregnancy may represent two lives, and thus giving them priority is aligned with "do the greatest good for the greatest number." Accordingly, such patients with MSOFA scores above the Crisis MSOFA Cutoff should be considered for continued ICU/ventilator care, unless their clinical condition or expressed wishes indicate otherwise.

Tiebreakers: Because younger persons generally have better short-term mortality outcomes than older persons with the same clinical condition, when after individualized assessments of short-term mortality risk, not all patients with similar MSOFAs can be given ICU/ventilator care, relative youth may be used as a tiebreaker.

Step 4)

We can expect that the degree of crisis will wax and wane. By making daily determinations of ICU/ventilator demand compared with supply, the CTO should adjust the Crisis MSOFA Cutoff as needed, and should communicate it at least daily to critical care providers and facility, system, and state Incident Command for ongoing load leveling. The CTO will also address appeals from either families or critical care providers. As the crisis wanes, the Crisis MSOFA Cutoff will rise and eventually will not be needed to maintain adequate ICU/ventilator capacity. This should be communicated to the state. Crisis Standards should be lifted when all hospitals have been load leveled out of using a Crisis MSOFA Cutoff, as the state returns to contingency care and eventually conventional care.

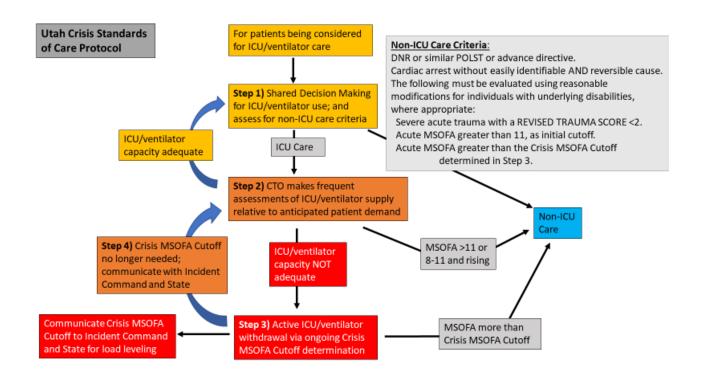


Table 1: Modified Sequential Organ Failure Assessment (MSOFA)

***There is a need for reasonable modification for patients with underlying disabilities.

Variable	Score 0	Score 1	Score 2	Score 3	Score 4	Row Score
SpO ₂ /FIO ₂						
ratio* or nasal	>400 or room	316-400 or	231-315 or	151-230 or	≤150 or	
cannula or	air Spo2 >90%	Spo2 >90% at	Spo2 >90% at	Spo2 >90% at	SpO2 >90%	
mask 02		1-3 L/min	4-6 L/min	7-10 L/min	at >10	
required to					L/min	
keep Spo2						
>90%						
Jaundice	no scleral			jaundice/		
	icterus			scleral icterus		
Hypotension†	None	MABP < 70	dop <5	dop 5-15 or	dop >15 or	
				epi <u><</u> 0.1 or	epi >0.1 or	
				norepi ≤0.1	norepi >0.1	
Glasgow Coma						
Score	15	13 -14	10 to 12	6 to 9	<6	
Creatinine	<1.2	1.2 - 1.9	2.0 - 3.4	3.5-4.9 or	>5 or urine	
level, mg/dL				urine output	Output	
				<500 mL in 24	<200 mL in	
				hours	24 hours	

MSOFA score is the total score from all rows =

†MABP = mean arterial blood pressure in mm Hg (diastolic + 1/3(systolic - diastolic)) Dop = dopamine in mcg/kg/min/epi = epinephrine in mcg/kg/min/norepi = norepinephrine in mcg/kg/min

^{*}SpO2/FIO2 ratio: SpO2 = Percent saturation of hemoglobin with oxygen as measured by a pulse oximeter and expressed as % (e.g., 95%); FIO2 = Fraction of inspired oxygen; e.g., ambient air is 0.21 Example: if SpO2=95% and FIO2=0.21, the SpO2/FIO2 ratio is calculated as 95/0.21=452